27. (Amended) The material identification system of claim 26, wherein the user-interface includes a touch screen capable of receiving input from the user and displaying information about the product.

28. The material identification system of claim 25, wherein the identification tag comprises a passive transponder and an electrically erasable programmable read-only memory (EEPROM).

29. The material identification system of claim 28, wherein the EEPROM stores information about the material.

30. (New) The liquid handling system of claim 1 wherein said communication means is further for directing information to the storage means.

31. (New) The liquid handling system of claim 11, wherein said radio frequency (RF) antenna is further for directing information to the RFID tag.

REMARKS

Rejections pursuant to 35 USC § 103

The Examiner has rejected all independent claims as unpatentable over Murayama et al (U.S. Pat. No. 6,282,458) in view of McCarrick et al (U.S. Pat. No. 5,953,682). Namely, the Examiner states that it would be "obvious to... use the gas tracking and release system of McCarrick" and that

there is motivation to combine the Murayama reference "to provide data on the gas to the release system". However, as described below, the references, either alone or in combination, fail to account for or make obvious features now claimed in amended independent claims 1, 11, 16, 20, and 25.

The noted independent claims have been amended as indicated above, to clarify that "information" may be read or obtained at a time when the liquid is accessible for processing or being used. That is, unlike the release system of McCarrick, 'information' may be obtained "when the interior [of a liquid container] is 'accessible' or 'coupled' or 'communicating' (as in amended claims 1, 11, 20 and 25)" to or with a controller for processing. Stated another way, the 'information' may be read "during... controlling" of liquid processing.

Because the "information" is made available to the system simultaneous with the liquid itself, the information may be updated *during* processing. As a result, the information, which may change during a process, remains constantly available. For example, it may be of value to have variable or changing information constantly available in determining "when the liquid is to be used in a process and how much of the liquid is used in a process" (p. 11, first paragraph).

Even when viewed in combination, McCarrick and Murayama could do no more than obtain or provide information independent of any processing that takes place with respect to the contents of the container. The information described in these references is not continuously updated or available as it is obtained irrespective of actual canister contents or availability thereto.

In light of these arguments, applicant respectfully requests removal of rejections pursuant to 35 USC § 103. In addition to the above noted independent claims, pending claims 2-10, 12-15, 17-19, 21-24, and 26-31 remain dependent there from and allowable for the reasons stated above with respect to the independent claims.

Conclusion

In light of the above remarks, applicants respectfully submit that claims 1-31 are in condition for allowance. The Examiner is requested to contact the undersigned attorney at (203) 794-1100 should this be seen as helpful in advancement of prosecution of this application.

VERSION OF CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A liquid handling system comprising:

a container having an interior for[capable of] holding a liquid;

a storage means[,] coupled [with the]to said container[,]and for [electronically]storing information relating to the liquid;

a communication means for [storing information to and reading]obtaining information from the storage means; and

a controller means, coupled [with the]to said communication means[,] and for controlling processing of the liquid based on the information, the obtaining to occur when the interior is accessible to said controller means[read from the storage means by the communication means].

2. (Amended) The liquid handling system of claim 1, wherein the controller means includes[comprises] a user-interface capable of receiving input from a user.

3. The liquid handling system of claim 2, wherein the controller means further controls processing the liquid based on input received by the user-interface from the user.

4. (Amended) The liquid handling system of claim 3, wherein the controller means further controls processing the liquid by comparing the input received by the user-interface from the user to information read from the storage means[to determine whether the liquid in the container should be dispensed to a process].

5. The liquid handling system of claim 2, wherein the user-interface comprises a touch screen capable of receiving input from the user and displaying information about the liquid contained in the container.

6. (Amended) The liquid handling system of claim 1[, the liquid handling system] further comprising:

a cap for coupling with the container such that the liquid is sealed in the container; and

a connector for coupling with the cap <u>for dispensing the liquid</u> [such that the liquid can be dispensed]from the container through the connector.

7. The liquid handling system of claim 6, wherein the storage means is mounted on the cap and the communication means is mounted on the connector.

8. The liquid handling system of claim 6, wherein the storage means is mounted on the connector and the communication means is mounted on the cap.

9. The liquid handling system of claim 1, wherein the communication means is a radio frequency (RF) antenna and the storage means is a passive radio frequency identification (RFID) tag.

10. The liquid handling system of claim 9, wherein the RFID tag comprises a passive RF transponder and an electrically erasable programmable read-only memory (EEPROM).

11. (Amended) A liquid handling system comprising:

a container having an opening [and capable of]for holding a liquid;

a cap for coupling with the opening [such that]for sealing the liquid [is sealed]in the container;

a radio frequency identification (RFID) tag mounted on the cap;

a connector for coupling with the cap [such that]for dispensing the liquid [can be dispensed] from the container through the connector;

a radio frequency (RF) antenna mounted on the connector for [which is capable of storing information to and]reading information from the RFID tag; and

a controller coupled with the RF antenna for [such that the controller is capable of] processing the liquid[from the container] based on the information, the reading to occur as said connector is coupled to said cap[read from the RFID tag by the RF antenna].

12. (Amended) The liquid handling system of claim 11, the connector further comprising:

a connector head; and

a probe extending from the connector head and insertable through a center of the cap and into the opening, the probe having a flow passage therein for coupling said connector to said cap.

13. The liquid handling system of claim 12, wherein a pump is coupled with the probe and with the flow passage for pumping liquid through the probe and the flow passage.

14. The liquid handling system of claim 11, wherein the RFID tag comprises a passive RF transponder and an electrically erasable programmable read-only memory (EEPROM).

15. The liquid handling system of claim 14, wherein the EEPROM stores information about the liquid contained in the container.

16. (Amended) A method of handling liquids[, the method] comprising:

providing a container for[capable of] holding a liquid;

coupling [an electronic]a storage device to the container;

[electronically]storing information about the liquid on the [electronic]storage device;

reading the information from the[electronic] storage device; and

controlling processing of the liquid with a controller [from the container]based on the information[read from the electronic storage device], said reading to occur during said controlling.

17. The method of claim 16, further comprising:

coupling a cap to the container such that the liquid is sealed in the container;

coupling a connector to the cap such that the liquid can be dispensed from the container through the connector; and

mounting an antenna to the connector.

18. The method of claim 16, wherein the electronic storage device is a RFID tag comprising a passive RF transponder and an electrically erasable programmable read-only memory (EEPROM).

19. The method of claim 18, wherein the EEPROM stores information relating to the liquid contained in the container.

20. (Amended) A material identification system comprising:

identification means for storing information relating to a material at an interior of a container;

communication means for[storing information to and] reading the information from the identification means; and

controller means coupled to the communication means for regulating processing of the material based on the information, the information obtained as the interior is accessible to said controller means[read from the identification means by the communication means].

21. (Amended) The material identification system of claim 20, wherein the controller means includes[comprises] a user-interface capable of receiving input from a user.

22. The material identification system of claim 21, wherein the controller means further regulates processing of the material based on input received by the user-interface from the user.

23. The material identification system of claim 22, wherein the controller means further regulates processing the material by comparing the input received by the user-interface from the user to information read from the identification means to determine whether the material should be processed.

24. The material identification system of claim 21, wherein the user-interface comprises a touch screen capable of receiving input from the user and displaying information about the material.

25. (Amended) A material identification system comprising:

an identification tag for storing information relating to a material at an interior of a container;

an antenna [capable of]for reading and storing the information [to and reading]the information from the identification tag; and

a controller coupled with the antenna to regulate[such that the controller regulates] processing of the material based on the information [read from the identification tag by the antenna], the information obtained as the interior is in communication with said controller.

26. The material identification system of claim 25, wherein the controller comprises a user-interface capable of receiving input from a user.

27. (Amended) The material identification system of claim 26, wherein the user-interface includes[comprises] a touch screen capable of receiving input from the user and displaying information about the product.

28. The material identification system of claim 25, wherein the identification tag comprises a passive transponder and an electrically erasable programmable read-only memory (EEPROM).

29. The material identification system of claim 28, wherein the EEPROM stores information about the material.

30. (New) The liquid handling system of claim 1 wherein said communication means is further for directing information to the storage means.

31. (New) The liquid handling system of claim 11, wherein said radio frequency (RF) antenna is further for directing information to the RFID tag.

Applicant does not believe that any fee is due in connection with the foregoing. However, any deficiencies may be charged to the deposit account 50-0860.

Respectfully submitted,

William F. Ryann
Registration No. 44,313

Advanced Technology Materials, Inc.
7 Commerce Dr.
Danbury, Ct. 06810
203 794-1100, Ext. 4140
203 797-2544 Fax
Attorney Ref: ATMI-522